

Pantechs Laboratories, Inc. Order: 503-4218 - Order Date: 2/9/2023

**Order Description: North Hobbs Unit, Samples from Central Tank, North, and West Batteries for Hydrocarbon Analyses**

SAMPLE ID		COLLECTION DATA	
Operator	Occidental Permian Ltd.	Pressure	27 psig
Location	South Hobbs Unit	Sample Temp	N/A
Site	Central Tank Battery	Atm Temp	50 F
Site Type	Battery	Collection Date	02/09/2023
Sample Point	Gas Leg of Production Separator	Collection Time	3:11 PM
Spot/Comp	Spot	Collection By	Cody Carson
Meter ID		Pressure Base	14.650 psi
Purchaser		Temperature Base	60 F
Fluid	Gas	Container(s)	PL2332

**GPA 2261 Gas Fractional Analysis with Water Vapor**

COMPOUND	FORMULA	MOL%	WT%	GPM
NITROGEN	N2	0.056	0.033	0.006
CARBON DIOXIDE	CO2	80.302	74.480	13.748
HYDROGEN SULFIDE	H2S	1.509	1.084	0.204
WATER VAPOR	H2O	0.553	0.210	0.032
METHANE	C1	0.483	0.163	0.082
ETHANE	C2	0.390	0.247	0.105
PROPANE	C3	2.647	2.460	0.733
I-BUTANE	iC4	1.653	2.025	0.543
N-BUTANE	nC4	4.705	5.763	1.490
I-PENTANE	iC5	2.284	3.473	0.840
N-PENTANE	nC5	1.765	2.684	0.642
HEXANES PLUS	C6+	3.653	7.378	1.575
TOTALS:		100.000	100.000	20.000

Value of "0.000" in fractional interpreted as below detectable limit.

If Onsite H2S testing is performed, its resulting value is used in fractional table

**GPA 2172/ASTM D3588 CALCULATED PROPERTIES**

WATER CONTENT	BTU/CF	Specific Gr.	Z Factor	Mol Weight	Wobbe IDX
DRY	653.00	1.651	0.990	47.351	508.26
MEASURED WATER	653.46	1.655	0.990	47.450	

**Water Vapor**

GPM	PPMM	LBS/MMSCF	SAMPLE SATURATED
0.032	5,530.000	263.333	No

**Onsite Testing by Stain Tube**

METHOD	TYPE	MEAS VALUE	MOL%	GRAINS/100	PPMV
GPA2377	H2S	1.40 vol%	1.5093	958.43	15,239.0

Mol%, Grains/100, PPMV are pressure and temperature corrected to base conditions.

## UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM

Facility: South Hobbs Unit

Flare Date: 4/19/2023

Duration of event: 1 hour and 35 minutes

MCF Flared: 177

Start Time: 09:14 PM

End Time: 10:49 PM

Cause: Compression Equipment Shut down &gt; Amot valve Failure

Method of Flared Gas Measurement: Gas Flare Meter

Comments: This upset event was not caused by any wells associated with the facility

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1. **Reason why this event was beyond Operator's control:** The emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable breakdown of equipment or process that was beyond the owner/operator's control, and did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. In this case, compressor LP 4500 unit's malfunction due to a Amot valve failure and had to be replaced. All OXY operations and facility equipment were running at maximized optimization prior to the malfunction which prompted the compressor unit to shut down. The facility and all its equipment were working as designed and operated normally prior to the sudden and without warning malfunction.
2. **Steps Taken to limit duration and magnitude of venting or flaring:** The steps taken to limit duration and magnitude of flaring was for an Oxy production tech to quickly respond to the compressor malfunction alarm and begin inspecting the unit, diagnose the issue, and make the necessary adjustments to restart the unit back to normal working service. It is OXY's policy to route all stranded gas to a flare during an unforeseen and unavoidable emergency or malfunction, in order to minimize emissions as much as possible. Internal procedures ensure that upon compressor unit shutdown, OXY production techs are promptly notified, and are instructed to assess the issue as soon as possible in order to take prompt corrective action and minimize emissions. Upon arrival, an Oxy production tech must assess whether compressor shutdown is due to damage and repair is needed, or whether there are other reasons. In this case, the Oxy production tech arrived from another facility rather quickly, as this an unmanned facility and performed a visual inspection of the malfunctioned compressor unit and finding that the Amot valve failed, the tech quickly replaced the part, and called for a maintenance tech to come out and check the unit out. The unit was restarted and returned to normal working operations. The facility and all its equipment were working as designed and operated normally prior to the sudden and without warning malfunction.
3. **Corrective Actions taken to eliminate the cause and reoccurrence of venting or flaring:** The emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable breakdown of equipment or process that was beyond the owner/operator's control, and did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. It is OXY's policy to route all stranded gas to a flare during an unforeseen and unavoidable emergency or malfunction, in order to minimize

emissions as much as possible. Oxy cannot take any corrective actions to eliminate the cause and potential reoccurrence of compressor malfunctions or facility shutdowns due to extreme weather-related conditions, affecting power usage, facility operations, etc. Oxy cannot predict or anticipate how extraordinary, extreme, and/or overwhelmingly violent weather conditions can get but OXY makes every effort to control and minimize flaring when those extraordinary, extreme, and/or overwhelmingly violent weather conditions are concluded and/or are no longer in effect. Oxy continually strives to maintain and operate its facility and its equipment in a manner consistent with good practices for minimizing emissions and reducing the number of emission events. The only actions that Oxy can take and handle that is within its control, is to continue with its preventative maintenance program for this facility and its compression equipment.

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

DEFINITIONS

Action 211277

DEFINITIONS

Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID: 157984
	Action Number: 211277
	Action Type: [C-129] Venting and/or Flaring (C-129)

DEFINITIONS

For the sake of brevity and completeness, please allow for the following in all groups of questions and for the rest of this application: <ul style="list-style-type: none"><li>• this application's operator, hereinafter "this operator";</li><li>• venting and/or flaring, hereinafter "vent or flare";</li><li>• any notification or report(s) of the C-129 form family, hereinafter "any C-129 forms";</li><li>• the statements in (and/or attached to) this, hereinafter "the statements in this";</li><li>• and the past tense will be used in lieu of mixed past/present tense questions and statements.</li></ul>
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QUESTIONS  
  
Action 211277

QUESTIONS

Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID: 157984
	Action Number: 211277
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

<b>Prerequisites</b> Any messages presented in this section, will prevent submission of this application. Please resolve these issues before continuing with the rest of the questions.	
Incident Well	Unavailable.
Incident Facility	[fJXK1520829861] South Hobbs Unit CTB

<b>Determination of Reporting Requirements</b> Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide additional guidance.	
Was this vent or flare caused by an emergency or malfunction	Yes
Did this vent or flare last eight hours or more cumulatively within any 24-hour period from a single event	No
Is this considered a submission for a vent or flare event	Yes, minor venting and/or flaring of natural gas.
An operator shall file a form C-141 instead of a form C-129 for a release that, includes liquid during venting and/or flaring that is or may be a major or minor release under 19.15.29.7 NMAC.	
Was there at least 50 MCF of natural gas vented and/or flared during this event	Yes
Did this vent or flare result in the release of ANY liquids (not fully and/or completely flared) that reached (or has a chance of reaching) the ground, a surface, a watercourse, or otherwise, with reasonable probability, endanger public health, the environment or fresh water	No
Was the vent or flare within an incorporated municipal boundary or withing 300 feet from an occupied permanent residence, school, hospital, institution or church in existence	No

<b>Equipment Involved</b>	
Primary Equipment Involved	Valve
Additional details for Equipment Involved. Please specify	Amot valve on the LP 4500 compressor

<b>Representative Compositional Analysis of Vented or Flared Natural Gas</b> Please provide the mole percent for the percentage questions in this group.	
Methane (CH4) percentage	0
Nitrogen (N2) percentage, if greater than one percent	0
Hydrogen Sulfide (H2S) PPM, rounded up	2
Carbon Dioxide (C02) percentage, if greater than one percent	80
Oxygen (O2) percentage, if greater than one percent	0
If you are venting and/or flaring because of Pipeline Specification, please provide the required specifications for each gas.	
Methane (CH4) percentage quality requirement	Not answered.
Nitrogen (N2) percentage quality requirement	Not answered.
Hydrogen Sufide (H2S) PPM quality requirement	Not answered.
Carbon Dioxide (C02) percentage quality requirement	Not answered.
Oxygen (O2) percentage quality requirement	Not answered.

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QUESTIONS, Page 2

Action 211277

QUESTIONS (continued)

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QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	04/19/2023
Time vent or flare was discovered or commenced	09:14 PM
Time vent or flare was terminated	10:49 PM
Cumulative hours during this event	2

Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Cause: Equipment Failure   Valve   Natural Gas Flared   Released: 177 Mcf   Recovered: 0 Mcf   Lost: 177 Mcf.
Other Released Details	Not answered.
Additional details for Measured or Estimated Volume(s). Please specify	Not answered.
Is this a gas only submission (i.e. only significant Mcf values reported)	Yes, according to supplied volumes this appears to be a "gas only" report.

Venting or Flaring Resulting from Downstream Activity	
Was this vent or flare a result of downstream activity	No
Was notification of downstream activity received by this operator	Not answered.
Downstream OGRID that should have notified this operator	Not answered.
Date notified of downstream activity requiring this vent or flare	Not answered.
Time notified of downstream activity requiring this vent or flare	Not answered.

Steps and Actions to Prevent Waste	
For this event, this operator could not have reasonably anticipated the current event and it was beyond this operator's control.	True
Please explain reason for why this event was beyond this operator's control	The emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable breakdown of equipment or process that was beyond the owner/operator's control, and did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. In this case, compressor LP 4500 unit's malfunction due to a Amot valve failure and had to be replaced. All OXY operations and facility equipment were running at maximized optimization prior to the malfunction which prompted the compressor unit to shut down. The facility and all its equipment were working as designed and operated normally prior to the sudden and without warning malfunction.
Steps taken to limit the duration and magnitude of vent or flare	The steps taken to limit duration and magnitude of flaring was for an Oxy production tech to quickly respond to the compressor malfunction alarm and begin inspecting the unit, diagnose the issue, and make the necessary adjustments to restart the unit back to normal working service. It is OXY's policy to route all stranded gas to a flare during an unforeseen and unavoidable emergency or malfunction, in order to minimize emissions as much as possible. Internal procedures ensure that upon compressor unit shutdown, OXY production techs are promptly notified, and are instructed to assess the issue as soon as possible in order to take prompt corrective action and minimize emissions. Upon arrival, an Oxy production tech must assess whether compressor shutdown is due to damage and repair is needed, or whether there are other reasons. In this case, the Oxy production tech arrived from another facility rather quickly, as this an unmanned facility and performed a visual inspection of the malfunctioned compressor unit and finding that the Amot valve failed,the tech quickly replaced the part, and called for a maintenance tech to come out and check the unit out. The unit was restarted and returned to normal working operations. The facility and all its equipment were working as designed and operated normally prior to the sudden and without warning malfunction.
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Oxy is limited in the corrective actions available to them to eliminate the cause and potential reoccurrence of compressor malfunctions as notwithstanding compressor engine design and operation, compressors are inherently dynamic and even the smallest alarms, false or true, can be sudden, reasonably unforeseeable and unexpected which can cause compression malfunctions to occur, thereby, triggering the unit's sensors to automatically shut down the unit to avoid catastrophic damage to the internal engine components. Oxy continually strives to maintain and operate its facility and its equipment in a manner consistent with good practices for minimizing emissions and reducing the number of emission events. The only actions that Oxy can take and handle that is within its control, is to continue with its preventative maintenance program for this facility and its compression equipment.

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ACKNOWLEDGMENTS

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**ACKNOWLEDGMENTS**

<input checked="" type="checkbox"/>	I acknowledge that I am authorized to submit a <i>Venting and/or Flaring</i> (C-129) report on behalf of this operator and understand that this report can be a <b>complete</b> C-129 submission per 19.15.27.8 and 19.15.28.8 NMAC.
<input checked="" type="checkbox"/>	I acknowledge that upon submitting this application, I will be creating a new incident file (assigned to this operator) to track any C-129 forms, pursuant to 19.15.27.7 and 19.15.28.8 NMAC and understand that this submission meets the notification requirements of Paragraph (1) of Subsection G and F respectively.
<input checked="" type="checkbox"/>	I hereby certify the statements in this report are true and correct to the best of my knowledge and acknowledge that any false statement may be subject to civil and criminal penalties under the Oil and Gas Act.
<input checked="" type="checkbox"/>	I acknowledge that the acceptance of any C-129 forms by the OCD does not relieve this operator of liability should their operations have failed to adequately investigate, report, and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment.
<input checked="" type="checkbox"/>	I acknowledge that OCD acceptance of any C-129 forms does not relieve this operator of responsibility for compliance with any other applicable federal, state, or local laws and/or regulations.

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CONDITIONS

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CONDITIONS

Created By	Condition	Condition Date
srojas	If the information provided in this report requires an amendment, submit a [C-129] Amend Venting and/or Flaring Incident (C-129A), utilizing your incident number from this event.	4/27/2023